

# Knowledge Management: The Case of Xerox

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**ABSTRACT:** *Recently, the concept of knowledge has been universally recognized as a critical source of achieving competitive advantage for organizations and as an extremely important intangible asset. In today's complex, ever-changing and competitive environment, organizations are challenged in order to successfully manage a wide range of fluctuations, to continuously innovate and deliver value to their customers. To achieve all of the above, they must be open to new ideas and develop a clear understanding of the ways in which knowledge is created, transferred and applied within organizations. Knowledge has been approached as the understanding of a subject or phenomenon, on a theoretical or practical basis. Knowledge management (KM) has been frequently used in recent years as a scientific term, while it has been applied to a range of activity sectors and disciplines. The purpose of KM is to manage, create and enhance the knowledge and intellectual assets of organizations. The effective use of KM can provide a number of benefits to organizations, such as enhancing the quality of services provided, increasing the response time developing innovations, offering above the norm customer value etc. The development of organizational knowledge must be sufficient, so that it can diffuse within the organization and applied where it is needed. Knowledge is increasingly recognized as a critical, strategic resource of organizations. In this paper, secondary data were utilized in order to adequately fulfill the set research objectives developed by the researcher, based on the critical evaluation of existing knowledge. Secondary data was used, while the case study research technique was utilized to develop valuable lessons for the organizations. The organization studied (XEROX) is a rare case of successful implementation of KM and was chosen for this reason. The research objective was to conceptually clarify the concept of KM, link it to organizational performance and provide suggestions in relation to strengthening KM and consolidating organizational processes of knowledge development and transfer.*

**KEYWORDS:** Knowledge, Knowledge management, tacit knowledge, explicit knowledge

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## INTRODUCTION

Recently, the concept of knowledge has been universally recognized as a critical source of achieving competitive advantage for organizations and as an extremely important intangible asset (Gao, Chai & Liu, 2018). In today's complex, ever-changing and competitive environment, organizations are challenged in order to successfully manage a wide range of

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fluctuations, to continuously innovate and deliver value to their customers. To achieve all of the above, they must be open to new ideas and develop a clear understanding of the ways in which knowledge is created, transferred and applied within organizations.

Knowledge has been approached as the understanding of a subject or phenomenon, on a theoretical or practical basis. Knowledge management (KM) has been frequently used in recent years as a scientific term, while it has been applied to a range of activity sectors and disciplines. The purpose of KM is to manage, create and enhance the knowledge and intellectual assets of organizations. The effective use of KM can provide a number of benefits to organizations, such as enhancing the quality of services provided, increasing the response time, developing innovations, offering above the norm customer value etc.

Carrion et al., (2016), emphasized that in order for organizations to remain competitive, it is not enough to have valuable resources, but their effective Knowledge management is required. Therefore, the development of organizational knowledge must be sufficient, so that it can diffuse within the organization and applied where it is needed. Knowledge is increasingly recognized as a critical, strategic resource of organizations (Khoualdi & Saleh, 2015).

The contemporary, dominant perspective has approached the concept of knowledge as a fluid and dynamic mixture of information, values and experiences, where they must be shared in order to contribute to the development of competitive advantages (Khoualdi & Saleh, 2015). Although some forms of intellectual capital can be transferred relatively easily, internal, organizational knowledge cannot be easily copied. This means that it can be a critical source of developing a sustainable competitive advantage, as it has value, it is rare, non-copy able and non-substitutable.

On the other hand, knowledge based on employees, their intellectual abilities and behavior, can be disrupted if someone leaves the organization. Therefore, the ability to retain employees is very important, so that internal knowledge remains within the organization. Knowledge management processes refer to the ways in which an organization treats knowledge at various stages of its life in an organization.

It is argued that there are four main processes in regards to KM: knowledge discovery, knowledge capture, knowledge sharing and knowledge application (Becerra-Fernandez & Sabherwal, 2010). In the same context, there has been an ongoing debate about who is the most important factor in terms of knowledge management. Many researchers argue that technology is the most basic element, while others consider the human factor as more important (Khoualdi & Saleh, 2015).

Information and communication technologies can contribute, among other things, to the storage of knowledge, its enrichment and its diffusion within organizations. Both are important to the successful operation of any knowledge management system. The success of KM depends on many factors, among which are effective human resource management and the organizational culture. Perhaps the most difficult part concerns the creation of a climate of

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Publication of the European Centre for Research Training and Development-UK trust based on human cooperation, the development of appropriate, fruitful relationships and the seamless exchange of knowledge.

Knowledge can be categorized into different types, such as tacit or explicit . This typology and understanding of the categorization of knowledge can be extremely important, in relation to the above. Explicit knowledge can be easily codified, modeled, and stored in material forms such as manuals, videos, and other documents belonging to the organizations. Its importance is due to the fact that it can remain in the organization, even if important executives or employees leave. This type of knowledge can be more closely approximate to what, on average, is considered as knowledge- something that can be easily transferred, through the use of appropriate tools, rules, manuals, etc.

Tacit knowledge, on the other hand, is difficult to share, as it depends on employee interactions. It is 'experiential' and practical (as opposed to abstract, academic) knowledge, inherent within workers, based on experience and insight and reinforced through the use of metaphors/parallels, the observation of things/ phenomena, etc. It can be the result of a series of experiences from the point of view of those who possess it. It can result from testing, experimentation, experiences, relationships, etc., while its transfer is based more on the organizational climate, the quality of working relationships, the quality of leadership, culture etc. It can be argued that tacit knowledge is like the hidden part of an iceberg, representing the larger, unseen part. Long ago, Polanyi (1966), emphasized that individuals "may know more than they can say."

In fact, there may be an unknown, "silent battle" between the two types of knowledge, where the dominance of the one side can lead to the weakening of the other. According to Orenaga-Roglá & Chalmeta, (2019), the prevalence of modern KM philosophies (based on technology), may have a negative effect on the transfer of tacit knowledge. Therefore, the prevalence of the technological aspect, where the emphasis is placed on systems, data analysis, etc., can lead to the non-liberation of creative forces within organizations, regarding tacit knowledge. This may concern modern organizations as a whole and is an issue that could be supplementary explored.

Something that has been emphasized as an important organizational pursuit is the ability to transform tacit knowledge into explicit , through understanding the nature of deep, social influences. These factors may be largely social: they concern the ways in which social groups may broaden their perceptions within organizations or how various tasks are more widely perceived. In addition, this knowledge can be transferred, in the case that various social contexts can be exchanged, in the context of open discussions within intra-departmental or inter-departmental groups (Al Ahbabi et al., 2019).

Nonaka, (1994) had long emphasized the importance of creative thinking and support at all organizational levels, as a necessary condition for the transfer of tacit knowledge. Furthermore, that the repetitive processes within the organization, can hurt the creative forces within the organizations- as if there is a dichotomy between creativity and efficiency that needs to be understood and seriously evaluated by the organizational leaders.

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As there are multiple levels of analysis (individual, group and organizational), tacit knowledge within groups may be influenced by the quality of working relationships, which may lead to organizational effectiveness, but not necessarily to efficiency. Edmondson et al. (2003), argued that tacit knowledge can significantly affect organizational performance when the coordination and management of innovative technologies is based to a significant extent on this type of knowledge. Therefore, there can be a win/win combination at the level of using innovative technology and tacit knowledge.

Nonaka and von Krogh, (2009), emphasized that tacit knowledge can be a foundational force for change and can act a social catalyst at the level of innovation and social practice. In the same context, misconceptions that relate knowledge only to information must be overcome (Nonaka and Von Krogh, 2009). The key issue with tacit knowledge is its transfer, due to its intangible, subjective and intuitive nature .

Its transfer can be done mainly through the practical implementation of certain actions or the relative awareness of the leadership and the adoption of specific policies. These policies may concern, for example, the systematic gathering of employees' stories and lessons learned in relation to difficulties they faced or anything they gained internally from their experience as workers in an organization (Reamy, 2002; Bozarth, 2014; Malamed, 2024). It can be about analyzing how they worked to successfully respond to the tasks assigned to them, lessons or insights they developed and internalized, etc.

As the tacit part of organizational knowledge can amount to a large percentage, the performance of KM systems significantly depends on the successful management of tacit knowledge, which concerns the quality of human interaction. Organizations therefore, may have to choose between two paths- they can either focus on technology, on people, or discover optimal combinations and solutions. These decisions can be critical to long-term success and survival in today's environment. The silencing and non-systematic engagement with tacit knowledge can, among other things, lead to: lost opportunities in terms of the competence of new employees, as training and mentoring can to some extent suffer. Also, in the dependence on skilled workers, as in the case of someone leaving the organization, important skills and knowledge may disappear (Leonard, 2014). This means that tacit knowledge should be systematically and structurally (at the leadership level) addressed and measures must be taken in order to convert it into explicit knowledge, so that it remains within the organizations regardless of departures and uncontrollable circumstances.

An organization is a socio-economic system, consisting of people who are gathered and work together for some common goals, while also having individual intentions and pursuits. The overall, abstract alignment between organizational and individual goals can be critical. In addition, it should not be taken for granted, as individual aspirations may conflict with organizational ones, in various circumstances and contexts. Organizational culture could be a factor that has a significant influence on KM practices, as obviously has to do with human interactions, attitudes and behaviors

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Organizational culture has been defined as "the set of shared, taken-for-granted tacit assumptions held by a group that determine how it perceives and reacts to its various environments" (Schein, 1996). Culture (like knowledge) can become a source of achieving sustainable competitive advantage, since it can be valuable, rare and imperfectly imitable .

Martin, (1992), emphasized that culture acts as a normative glue, enabling coordination and achieving stability. It can create value for an organization by simplifying information processing, reducing supervisory costs, and smoothing the tension between employees. Culture may work both ways- by directly normalizing relationships within organizations and by indirectly discouraging employees who disagree with central organizational values and guidelines.

The field of knowledge management has been significantly enriched through the contribution of a series of researches and experiences from a wide range of scholars, while it can be considered as a kind of method or philosophy (Gao, Chai & Liu, 2018). KM is considered a part of the broader knowledge field of management, but it is also closely related to information and communication technologies .

KM can be approached from various perspectives, as there are a number of fields of knowledge that have contributed to the development of relevant information. Important are the fields of philosophy, cognitive science, social science, management, information science, machine learning, artificial intelligence and economics. In today's era of the prevalence of knowledge, the reason for its increased perceived importance lies in the fact that the effective management of knowledge development processes can contribute to the improvement of dynamically learning organizational effectiveness.

To develop and maintain a competitive advantage, an organization must have capabilities that develop knowledge-based activities and processes, while these are becoming increasingly important. An extensive number of studies have found a positive relationship between KM and organizational performance (Agbim et al., 2013; Gholami et al., 2013; Rasula et al., 2012). However, there seems to be a lack of clarity and understanding in relation to the above. For example, Davenport (1999) pointed out that some organizations can establish a causal relationship between KM practices and performance. However, this does not mean that this relationship can work in a long-term and sustainable way. In the same context, it seems that there are probably many intermediary variables between the effect of KM on performance, something that should be studied in the future on a larger scale.

Furthermore, it can be emphasized that most of the studies on KM and organizational performance have been conducted in developed countries and in large organizations .In this paper, secondary data were utilized in order to adequately fulfill the set research objectives developed by the researcher, based on the critical evaluation of existing knowledge. Secondary data was used, while the case study research technique was utilized to develop valuable lessons for the organizations. The organization studied (XEROX) is a rare case of successful implementation of KM and was chosen for this reason. The research objective was to

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Publication of the European Centre for Research Training and Development-UK conceptually clarify the concept of KM, link it to organizational performance and provide suggestions in relation to strengthening KM and consolidating organizational processes of knowledge development and transfer.

## **LITERATURE REVIEW**

There are many approaches and definitions regarding the concepts of knowledge (Gao, Chai & Liu, 2018) and KM (De Silva, 2019). Due to the unprecedented technological progress and the underlying processes of globalization, the importance of natural resources has decreased, while modern knowledge is based on research, development, skills and education

Due to the highly fluid external environment, where constant change is the only constant, modern organizations must constantly be able to manage challenges, take advantage of opportunities, understand (to the upfront extent) the external environment and consumer behavior, act proactively, etc. The development of knowledge and insights may be the only way to respond to the above challenges. Knowledge is now considered a central organizational resource

Knowledge can be approached as concept, skill, experience and vision. The above elements, or their hidden components, may provide a comprehensive framework for the creation, evaluation and use of information that may flow within/outside an organization. Therefore, knowledge can contribute to the effective management of new and existing information, its prioritization, etc., acting as a conceptual compass and filter.

Anand & Walsh, (2016) claimed that the concept of knowledge includes information, skills and expertise. Nevertheless, specialization can probably contribute to the development of tacit knowledge. Otherwise, half-knowledge at the level of explicit knowledge and expertise can lead to half-knowledge and crooked paths in the case of tacit knowledge. It is very important that the conversion of explicit/tacit knowledge can be done as smoothly and carefully as possible. This requires employees with sufficient understanding of constraints and methods, able to flexibly manage the strengths/constraints of both types of knowledge, while deeply engaging in the social experiences/phenomena. Therefore, the essential engagement of employees can be a necessary condition for the essential involvement with the concept of organizational knowledge.

Davenport and Prusak, (2000) defined knowledge as a fluid mixture of contextualized experience, values, contextual information, and expert knowledge that may provide a framework for evaluating and integrating new experiences and information. The above authors provided a comprehensive definition of the concept under study, considering- on the one hand the value of experiences/insights and on the other hand the importance of "objective information and systems".

According to the knowledge-based view, an organization is judged and evaluated based on its intangible assets at the level of knowledge development/transfer, at a dynamic level of analysis.

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In fact, the role of leadership is precisely to understand, emphasize and strengthen this set of intangible elements, as a dynamic means of creating and enhancing the overall value offered

Alavi and Leidner, (1999) have defined KM as a systemic and organizationally defined process for acquiring, organizing and communicating both tacit and explicit knowledge so that employees can be more effective and productive in work. This definition can be very important, as on the one hand it speaks for the need to establish a KM system, while on the other hand it refers to the basic typology of the concept of knowledge.

The establishment of KM, may mean the support from leadership, the monitoring of the system, being willing to take changes and corrective actions. A KM system cannot be adopted and not be supported. It should act as an organizational priority where system evaluation measures should be designed and implemented.

The main source of knowledge production is human efforts developed through educational and research activities. Knowledge capture is the process of retrieving accumulated knowledge that resides within people, objects, or entities. Therefore, knowledge can reside both within the human mind and in objects, processes or artifacts.

KM can transform organizations to new levels of effectiveness, efficiency and scope by harnessing the support of information science. As mentioned by Sharma and Kaur (2016), Nonaka and Takeuchi stated four ways of managing knowledge which includes socialization, externalization, internalization and the combination which has been called the model SECI. In socialization, tacit knowledge is transformed or transferred as tacit, through discussions, meetings, observation, practice, etc. In the case of externalization, tacit knowledge becomes explicit and can be stored and used in documents, manuals, etc. In combination, explicit knowledge is transformed into another form of explicit knowledge while in internalization explicit knowledge is transformed into tacit knowledge by individuals (the most difficult undertaking of all)

In relation to the above, important theories and evidence have been developed, while KM has overall evolved into an organic/holistic paradigm. These two approaches correspond to the strategy of coding and personalization (Hansen et al., 1999). The first strategy is more suitable for the management of explicit knowledge, while the latter concerns tacit knowledge. Essentially, the authors tried on the one hand to categorize the strategies adopted by organizations (mainly consulting organizations, which manage knowledge and its provision) and on the other hand to propose the optimal strategies for all organizations.

They found that the most successful organizations had adopted one strategy and developed the second additionally. They therefore found that the success at the KM level lies in clearly choosing a path. Some organizations have chosen the path of codification, where the emphasis is on storing explicit knowledge so that it can be used in subsequent projects. This meant an emphasis on creating databases that are accessible to all involved parties (Hansen et al., 1999).

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In this way, executives had an vital access to the experience and the best practices of past projects. This strategy, according to the authors, suits organizations that face recurring problems and the acquisition of specialized knowledge can contribute to the efficient fulfillment of projects.

On the other hand, the organizations that had to deal with more complex, non-repetitive phenomena, appeared to be more successful, adopting the second strategy, where the emphasis is placed on the development of the quality of relationships, work interactions, teamwork strength and creativity.

This can be done either by targeting the right executives at the HRM level, or by trying to create the right conditions for brainstorming and for the development of internal, seamless communication. These organizations strategically aim to develop high quality creative solutions to high importance, complex strategic problems, while not investing significantly in technology and IT capabilities. Additionally, something extremely interesting that came across was the following- the most successful organizations focused on one strategy while the other functioned as a complement (Hansen et al., 1999).

Khoualdi & Saleh, (2015), argued that KM is a strategy that helps transform knowledge into action and appropriate distributions in such a way as to improve organizational performance. This can be done by consciously providing the right knowledge for someone at the right time. There are often times when employees seek the appropriate knowledge to solve problems they face. This is the when the effectiveness of a KM system can be deeply felt and experienced from the employees.

Based on the expert's view above, knowledge management ultimately helps an organization to find, collect, select, organize, disseminate and transfer information and expertise (Becerra-Fernandez & Sabherwal, 2015). In practice, knowledge discovery can develop tacit knowledge that is transformed into explicit, through the effective analysis of data/information or the combination of prior knowledge. On the other hand, the systematic management of explicit knowledge will certainly affect the tacit or "internal philosophies and conceptualizations" of employees.

The main source of knowledge production is human efforts developed through research activities (Baptista et al, 2017). Knowledge sharing is the exchange of either tacit or explicit knowledge through socialization or knowledge sharing. Knowledge sharing helps organizations improve their performance as employees generate ideas that can drive innovation

As shown in the Table below, the discovery and creation of knowledge is related to the ability to combinatorically analyze prior knowledge and information through socialization. Socialization is critical, as a major problem facing organizations is the following: employees are mainly concerned with the fulfillment of their tasks and are not motivated to share the knowledge and insights/lessons they have gathered so far. In order for this to happen, systematic organizational actions, must be in place.



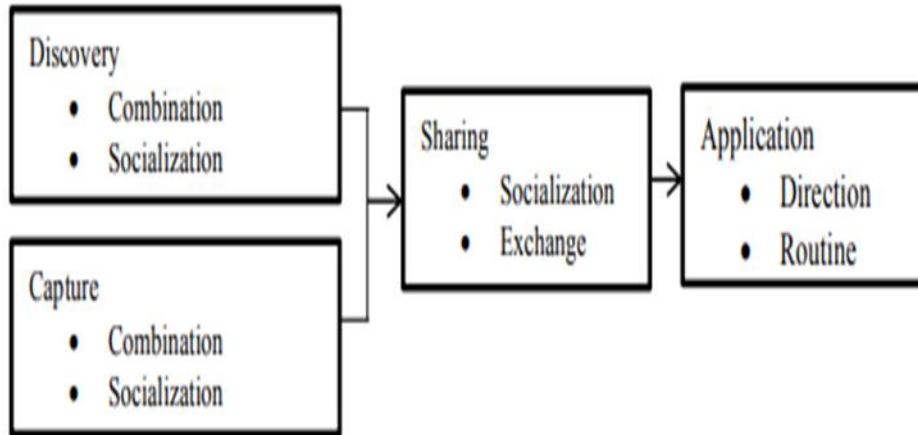


Figure 1. Knowledge management process

Source: Becerra-Fernandez & Sabherwal, (2015)

For this to happen, organizational processes and policies should be designed to enhance the exchange of knowledge, and on the other hand, this exchange should be rewarded at the level of culture. Finally, it appears that the application of any knowledge can lead to changes in direction and routine. This may involve day-to-day operations, which may be traced back to higher levels of organizational functioning.

According to Becerra-Fernandez and Sabherwal (2010), KM can affect organizations and their performance, at four levels: people, processes, products and overall organizational performance.

KM affects employees in several ways: first, it can facilitate their learning (from each other and from organizational sources). This learning can enable an organization to be constantly ready and able to implement required changes in response to global market and technology changes. Secondly, new knowledge can enhance job flexibility and satisfaction (due to the workers enhanced ability to learn solutions to past business problems). One study found that in organizations that have more employees who share knowledge with each other, revenue and profitability were positively affected

Employees tend to feel better through acquiring knowledge and improving their skills and at the same time their market value is enhanced relatively to employees of other organizations. KM can only be delivered effectively through the support of top management. Alhosani (2011) studied job satisfaction and knowledge sharing in the oil and gas industry. The study revealed that job satisfaction levels have a direct positive relationship with employee's knowledge sharing behaviors. Therefore, in addition to establishing KM systems, organizations should be serious about increasing employee satisfaction, and minimizing sources of dissatisfaction.

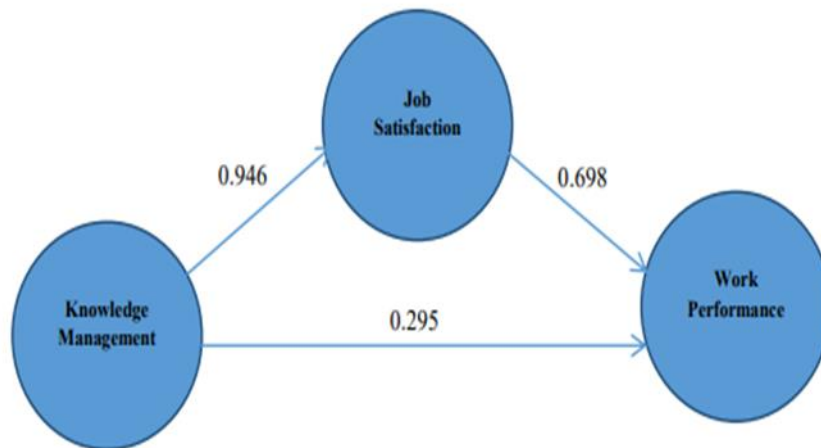


Figure 2. Knowledge management, satisfaction and work performance

Source: Rahmayanto, Hakim&Rommy, (2019)

From the above Figure, it appears that job satisfaction can have an important mediating role, regarding the relationship between KM and job performance. This may be an extremely important finding, as job satisfaction is now considered a determinant of organizational success. Job satisfaction, among others, has been linked to customer satisfaction, an extremely powerful measure of organizational performance (Al Kurdi, Alshurideh & Alnaser, 2021).

The explanation that can be highlighted as follows- satisfied employees are more likely to share knowledge and experiences for the good of the organization. In addition, successful knowledge management can lead to the development of employees who feel that they are part of a collective effort, where everyone can contribute according to their experiences.

Regarding the external part of satisfaction (salaries, etc.), successful KM can contribute to the increase of organizational performance, and to the potential increase of work privileges. Internally, knowledge sharing and inclusion can lead to situations where employees feel part of a meaningful mission, a collective effort that has a moral foundation and where they can actively participate. It is an essential form of empowerment and meaning finding, in contrast to a mechanistic logic where each employee deals with the simple fulfillment of his duties, without actively participating in the continuous improvement of the organization.

One of the main arguments of the introduction and implementation of KM practices is that it will lead to the development of organizational capabilities and subsequently to the improvement of the performance of organizations. This performance can concern a series of elements and dimensions, such as organizational flexibility, the ability to manage crises, the ability to understand complex markets and consumer groups, the ability to find solutions to complex problems, etc.

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Kiessling et al., (2009) concluded that KM can have a positive effect on organizational innovation, product improvement as well as employees. The work of employees can be improved in terms of quantity, quality, saving time, commitment, internal satisfaction, demonstration of cooperation, etc. .

KM can also enhance the effectiveness and efficiency of human resources of organizations. The quality and power of new knowledge can be used to make new decisions more effectively. It can be concluded that when the quality of organizational knowledge is healthier, organizational performance will tend to improve significantly. Knowledge-rich organizations can enhance their creativity and efficiency can help them reach new levels of quality .

Liao & Wu, 2009) stated that, an effective KM through the development of capabilities will be an advantage for organizations' performance. For the majority of organizations, achieving improved performance depends primarily on effective knowledge management, while investments in KM have continuously increased in recent years. In the present condition, organizations believe that they must have the right knowledge in the required form and content to be able to succeed in the short and long term. Seleim and Khalil (2007) who examined the relationship between KM and organizational performance found a positive relationship in Egyptian software management companies.

The same result was reached by Daud & Yusuf, (2008) in their study involving 100 small and medium enterprises in Malaysia. The study found that KM has a positive and significant relationship with organizational performance. In the same vein, Rasula et al. (2012) examined the same impact in the context of Slovenia and Croatia, with similar results.

Agbim et al. (2013) examined the impact of KM on organizational performance using 328 service sector workers in Nigeria. They found that knowledge related to management, culture, and how to recognize structural knowledge were significantly and positively related to organizational performance.

From the literature review, the following can be highlighted:

- There is no academic convergence on the ways in which KM can be applied
- KM appears to be extremely important but also complex as it may include all key organizational variables- on the one hand the technology, its acceptance/support and on the other hand the strengthening of the culture, the working relations, the quality of the leadership and the messages signaled by the action of KMPolicies. Therefore, there does not seem to be an easy way to optimally apply the KM, while on the contrary, the need for an important organizational introspection and a critical assessment of the existing organizational philosophies is apparent and of vital importance
- KM can be a highly urgent matter. On the one hand, not dealing with it can be extremely damaging. On the other hand, the adoption of superficial measures can have a negative impact on organizational performance in the long run.

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- KM can be about the development of "emergent knowledge and insights" that were not accessible to organizations before its implementation, or processes that ensure long-term success. It is difficult to find how it will affect organizations directly and indirectly, in the short term and in the long term.

### **Company profile**

Xerox is an American multinational corporation that produces printers and document products, providing services in more than 160 countries. It is based in Norwalk, Connecticut, although most of its employees are based around Rochester. In 2017, the company had approximately 35,000 employees. Xerox is one of two honored companies in the Information Systems Industry, recognized for their commitment to sound corporate governance and prioritizing ethical business practices (Emanouil, 2018).

In 2018, only 135 organizations from 23 countries and 57 industries were honored. Evaluating and improving culture, authentic governance, commitment to transparency and respect for diversity were the key priorities of all those honored. "Every decision and action we take should demonstrate our unwavering commitment to a code of ethical business practices," said Xerox CEO Jeff Jacobson. "Our continued recognition by Ethisphere is a reflection of this commitment. Global businesses operating under a shared understanding of the law are now society's strongest voice for more humane conditions." Therefore, the company under study has not been simply innovative at the level of KM, but has therefore followed a "socially ethical route". It may seem like unrelated info, but a commitment to transparency and the support for transparency can be linked to a comprehensive and effective KM system.

### **Research analysis**

Many may remember the office Xerox machines that seemed to be constantly in need of repair. Or that there was a wait for days, waiting for a technician and the service to happen. Many could not have known, that all these were problems associated with the lack of internal communication and knowledge sharing. These wait times have been seriously reduced thanks to Xerox's knowledge management platform, Eureka. The platform was a breakthrough when it was developed in the early 1990s, allowing technicians to share tips for solving difficult or unusual equipment problems via small laptops in the field. This platform was an extremely important move by the organization under study, as it was facing many issues of internal coordination, communication, and finally customer service. The major breakthrough was done thanks to thinking "out of the box" (Doyle, 2016).

Xerox had a big problem at the KM level. There was a lack of communication between service engineers in particular, whose job it was to fix equipment problems for customers in the field. Although engineers were finding highly effective and valuable solutions to equipment issues, these solutions were not shared with the 24,000-person customer service team. Engineers were only allowed to share their solutions with other members locally, which involved very few people.

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Also, many workers may have developed strong feelings of resentment, in relation to what they were going through. That is, that they either worked hard and this was not recognized, or that they did not have the necessary resources to meet their work demands (perceived lack of organizational support) (Doyle, 2016).

In response to this obstacle, Xerox developed its own KM solution. Eureka was a professional, knowledge-sharing system where engineers could discover and document the solutions they implemented. The system allowed service engineers to place their name on articles, which boosted their reputation among their peers and encouraged more employees to take the time to share their knowledge. Therefore, the motivation behind knowledge sharing was to increase personal prestige and participate in a community with similar issues/ challenges, where providing solutions can be linked to feelings of connection, participation, perceived social influence, etc. Engineers also quickly realized that the more they shared their knowledge, the more likely they were to find matching knowledge on issues they might be facing.

As of 2016, Eureka had saved the company more than \$100 million in service costs. Although much has changed technologically since the service's early days, the now 20-year-old Eureka platform continues to rely on the small mobile devices carried by today's Xerox technicians. Xerox's Eureka represents an early example of the ability of a KM system to improve efficiency across an entire service delivery area and demonstrate the value of having a universally accessible information bank/ platform.

One of Eureka's biggest benefits remains unchanged: it offers help with issues for which no standard solution seems to apply. A critical factor in building trust in Eureka's information was for experts to review all tips submitted to the community knowledge base. Updates and details about product fixes have since been included from around the world, translated into English, and made accessible on every technician's device.

The total Eureka system allows technicians to immediately know how to solve problems on 80% of calls. The next step in the evolution of KM may be the integration of video and audio files to help technicians solve problems quickly the first time. It can also be used as a tacit transferring tool, where technicians can pass on valuable lessons from the problems they have faced, or report how they solve each problem (involving psychological states, feelings etc.).

It therefore becomes clear how an application at the KM level can solve multiple and complex issues. The point is to find ways for these policies to be meaningfully supported by leadership in order to impact performance through culture-level changes. Knowledge sharing as done in the above example can be done in modern hotels, financial, medical organizations and a number of other organizations. It is important that employees can at all times exchange knowledge, solutions and lessons learned in relation to the everyday challenges they face. This can also enhance a sense of community, which can maybe translate into organizational commitment.

## CONCLUSIONS

The company under study dealt with a relatively simple problem, where an extremely complex solution such as KM, was unraveled effectively, through the development of a system of joining the knowledge of the technical support and the scientific knowledge that contributed to the manufacture of the products. Of course, the innovative perspective of the leadership of the company under study, which proceeded to develop a KM system, cannot be underestimated, in times when corresponding ways of solving basic organizational issues were not widespread.

Nevertheless, the analyzed company was a "bright moment" in relation to the development of KM (along with a few other organizations such as Amazon, Toyota, etc.). This may possibly reveal the difficulty of modern organizations, to develop distinct KM systems, which can be able to stand as case studies. The general picture is probably the following- modern organizations are trying to rise to the occasion by adopting sporadic and piecemeal measures and policies in relation to KM. However, there is rarely a clear vision, or system/method, that can be recognized, monitored and inspire employees.

KM can be one of the most complex issues that today's organizational leaders face, especially given that they collectively understand that today's fluid environment requires significant initiatives in relation to the development and continuous sharing/upgrading of existing knowledge.

As it is a fact that services tend to prevail over products, organizations must constantly deal with increasingly abstract concepts such as brand image and customer experience. At the same time, it has been argued that organizations that manage products (in certain circumstances) may benefit in terms of perceived customer value when they present their product as service based (that is, its production is based more on human variables and relationships than in hard, impersonal procedures and tactics) (Ugolini, Cobelli & Gill, 2015).

These concepts have flooded the literature of marketing and marketing management. Consumers are more informed and demanding than ever before, due to constant access to information and reviews. This also means that they may choose products/services based on traditional logics such as price/value proposition, but may be significantly influenced by brand image and the way customer experiences are communicated, both by organizations and by customers. Brand image has emerged as an extremely important variable in achieving customer loyalty (among others) (Rahmasari et al., 2024). The concept of customer experience can be multi-dimensional and multi-level and concern cognitive processes, emotional, various combinations of them, etc. As emphasized above, the perspective of knowledge is a dynamic theory, which is confirmed by current developments.

In order to deliver meaningful customer experiences, organizations must increasingly think holistically and leverage every available source of knowledge. As the issues they face tend to

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become increasingly complex, it is important to first realize the importance of KM and instill such a system or philosophy that permeates all organizational functions and ways of thinking.

The concept of "inclusive urgency" exists and must be internalized. One opinion in the inside of the organizations cannot be ignored, when organizations are dealing with such complex, multi-layered problems. For example, the insights of employees in customer service or product manufacturing may contain the "wisdom" that an organization needs to differentiate itself. Combined with technological solutions, they can make the difference. Today's era requires (more than ever) the combined ways of knowledge recovery, transfer and application. In this day and age, not including different perspectives (of any kind) is not only politically incorrect, but organizationally dangerous.

There is no longer room for "enlightened" leaders that make strategic decisions, without looking for knowledge, in "every corner of the organization". There are no more margins where knowledge is not the central pursuit of organizations and this phenomenon is systematically studied, monitored and up-to-date ways of evaluating its progress are found. There are no longer competitive advantages (for the vast majority) of resource-based organizations.

Every organization is now judged more strictly than ever before. Consumers judge not only their business behavior and ethics (the way raw materials are transformed into products/services), but also the way they introduce themselves to the public, solve issues/crisis that arise and try to win their minds/hearts. In addition, the way virality works should concern modern organizations. There are examples of large companies that may for decades follow business models that are effective/efficient, while employees are not satisfied. In this day and age, a video of an employee engaging in destructive behavior against the company can do irreparable damage to the company's reputation. In fact, generation Z has been shown to be significantly less conservative in terms of work attitude. It appears to be a generation that values more than ever, the quality of the work experience, the balance of personal/professional life, the meaning inside the workplace, etc. Therefore, old approaches to HRM, can be harmful or old-fashioned to an extent.

Therefore, a holistic approach is required, based on a KM system that simultaneously values the hard/soft skills of employees. It is vital, that leadership supports the discovery of knowledge in these fields. As emphasized in the literature review, organizations depending on their sector and the problems they face, should focus on one direction (codification vs personalization), where the second one will function in a complementary way (Hansen et al., 1999).

More and more often, in recent years, the need to achieve organizational and work flexibility (Chaudhuri, Grandhi, Vrontis, Chatterjee, 2023), and resilience, especially in times of crisis, has been seen. Flexibility and resilience can be based on the above- on the one hand, pluralism is required at the level of decisions and understanding of (internal/external) trends, and on the other hand, resilience in terms of mistakes and failures and the existence of ambidextrous abilities at the level of leadership. In such a complex, fluid environment there must be tolerance for mistakes, experimentation and failures, otherwise there will be no systematic learning.

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## Epilogue

Something important that must be emphasized may be the separation between SMEs and large enterprises in regards to KM. From the introduction part, it was highlighted that KM has not been sufficiently studied in the SMEs context, which form the economic backbone of almost every country.

Small and medium-sized organizations that do not have significant resources may have to initially rely on the enormous capabilities of modern technology. New technology can provide an edge to organizations without the natural resources required in the past. At the same time, it can lead to other problems- small organizations may find that they can differentiate themselves from their competition, by leveraging new technologies and communicating with vast and diverse audiences at a low cost. This is probably no longer the case, (it may have been in the early days of E-marketing), as organizations can now be seen as a «small drop in an endless ocean".

Small businesses should understand (as well as large ones) the importance of KM and carefully plan the system they will adopt and implement in the future. They should deal comprehensively and holistically with the kinds of knowledge required to grow the business and achieve organizational goals. Whether it concerns the introduction of new technology, or the attraction of new executives with specific, desirable characteristics these can (combined) contribute to the development of an appropriate climate and culture. Otherwise, the organizations will adopt spasmodic, reactive measures that do not involve the concept of proactiveness and strategic thinking.

Large organizations (such as the one studied), may need to seriously engage in understanding the concept and typology of knowledge. Depending on the problems they systematically face, they should engage in the development of KM strategies that can be monitored/chosen to a satisfactory degree. Besides, they should always know that there is a short-term and a long-term perspective- some KM policies may not pay off immediately, while others may pay off quickly and not lead to long-term benefits. A focus on technology and explicit knowledge, for example, may fall into the first category.

Understanding how knowledge is developed and transferred in an organization needs a series of capabilities, which cannot be easily described and given in the form of bullet points in a scientific article. A simple case is that of the company under study, where a significant problem was the working disposition of knowledge sharing. Therefore, the question was-why should an employee share the knowledge he possesses, while he is already working hard trying to fulfill his duties?

On the one hand he/ she will participate in a community where he will find that for every knowledge he offers, he can receive unknown knowledge on issues that concern him/her. Possibly then, he can be truly happy about the knowledge/insight it offers, while at the same



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time he can feel positive feelings about the organization that has developed a corresponding system.

It can therefore be argued that almost any attempt to instill a KM system can lead to changing employee perceptions. On the other hand, leadership decisions that are less obvious and involve culture (such as developing creative teams, systematically rewarding divergent thinking, not punishing experimentation, etc.) may take time to lead to desired conditions. Many employees may be happy to share knowledge with other colleagues as they feel close to them. To exchange professional knowledge may not be so much about organizational success as about tightening their ties.

What is probably needed is a combined situation, depending on the context, the internal conditions, the field of competition, etc. The only thing that is certain is that if sufficient attention is not given to the above, there will be problems at the level of organizational survival at some point. Organizations may not have understood how a lack of KM can lead to a systematic, organizational decline in the modern era.

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